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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,640	04/09/2002	Arjun Selvakumar	IO-1012US	8729

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EXAMINER

SAINT SURIN, JACQUES M

ART UNIT PAPER NUMBER

2856

DATE MAILED: 09/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/936,640

Applicant(s)

SELVAKUMAR ET AL.

Examiner

Jacques M Saint-Surin

Art Unit

2856

✕

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/09/02 and 04/09/02.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 38-74 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 38-49 and 68-74 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 50-67 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6. 6) ☐ Other:

### **DETAILED ACTION**

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 1-37 have been renumbered as 38-74.

2. During a telephone conversation with Todd A. Bynum on 09/05/03 a provisional election was made without traverse to prosecute the invention of Group I, claims 38-49 and 68-74. Affirmation of this election must be made by applicant in replying to this Office action. Claims 50-67 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Priority***

3. Acknowledgment is made of applicant's claim for domestic priority under 35 U.S.C. 119(e).

### ***Specification***

4. The specification must be updated on page 9, lines 12-13, page 13, lines 28-29, page 17, lines 22-23, page 21, lines 3-4, page 27, line 1 and pages 38, lines 1-2.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than on year prior to the date of application for patent in the United States.

6. Claims 38-49 and 68-74 are rejected under 35 U.S.C. 102(b) as being anticipated by Henrion et al. (US Patent 5,652,384).

Regarding claims 38 and 68, Henrion et al. ('384) discloses an apparatus for detecting an environmental condition, comprising:

a housing (sensor assembly 10 of Fig. 1 has body, see: col. 4, line 38);

a measurement mass wafer coupled to the housing (proof mass 16, see: Fig. 1 and col. 3, line 29), the measurement mass wafer being responsive to the environmental condition;

at least one cap wafer (sensor assembly may be formed from wafers, see: col. 3, lines 32) coupled to the housing (10);

a plurality of bumpers (top cover or cap 12 and a bottom cover 14, see: Fig. 1 and col. 3, lines 29-30) geometrically disposed on the cap wafer for providing overshock protection; and

at least one electrode (electrode connection structure over the bottom cover 14, see: col. 6, lines 2-3) coupled to the measurement mass wafer (proof mass 16), wherein at least one of the plurality of bumpers and the at least one electrode is adapted to reduce stiction during apparatus operation (vertical stops 45 which extend from covers 12 and 14, also serve to limit movement of the mass 16 beyond the limits of springs 32 34 when large vertical shock forces are exerted against mass 16, see: col. 5, lines 19-23) .

Regarding claim 68, it is a method claim that recites the steps for performing the functions of the apparatus of claim 38. Therefore, it is rejected for the reasons set forth for that claim.

Regarding claims 39 and 69, Henrion et al. ('384) discloses such variable may be acceleration (see: col. 4, lines 29-30).

Regarding claims 40-43, Henrion et al. discloses sides 26A-26D have upper and lower edges at respective upper and lower surfaces 22, 24; mass 16 is spaced at 30 (see: Fig. 3) about its entire peripheral surface from adjacent rectangular frame 18 to define an open or void area therebetween, see: col. 3, lines 47-51). Regarding claim 43, Henrion et al. discloses a vent 9 is provided in top cover 12 to produce a vacuum within the top and bottom covers so as to prevent air molecules or contaminants from interfering with the movement of mass 16 with respect to frame 18 and with respect to top and bottom covers 12, 14, see: col. 6, lines 24-29.

Regarding claim 44, Henrion et al. discloses the sides 26A, 26B, 26C and 26D of mass 16 between surfaces 22 and 24 are of a concave V-shape, see: col. 3, lines 44-46.

Regarding claim 45-49 and 70-74, Henrion et al. discloses vertical stops 45 which extend from covers 12 and 14, also serve to limit movement of the mass 16 beyond the limits of springs 32 34 when large vertical shock forces are exerted against mass 16, see: col. 5, lines 19-23.

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**Conclusion**


9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques M Saint-Surin whose telephone number is (703) 308-3698. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (703) 305-4705. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956.

  
Jacques M. Saint-Surin  
September 05, 2003

  
HEZRON WILLIAMS  
SUPERVISORY PATENT EXAMINER  
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